SIEMENS

Data sheet

6ES7142-4BD00-0AA0

SIMATIC DP, electronic module for ET 200 PRO, 4 DO 24 V DC, 2.0A; Module diagnostics; incl. bus module, Connection module IO 6ES7194-4..00-0AA0 order separately



Supply voltage		
Load voltage 2L+		
• Rated value (DC)	24 V	
Short-circuit protection	Yes; per channel, electronic	
Reverse polarity protection	Yes; against destruction; load increasing	
Input current		
from load voltage 2L+ (without load), max.	20 mA	
from backplane bus 3.3 V DC, max.	20 mA	
Power loss		
Power loss, typ.	2 W	
Address area		
Address space per module		
 Address space per module, max. 	1 byte	
Digital outputs		
Number of digital outputs	4	
Short-circuit protection	Yes	
 Response threshold, typ. 	2.8 A	

Limitation of inductive shutdown voltage to	2L+ (-47 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
• on lamp load, max.	10 W
Load resistance range	
• lower limit	12 Ω
• upper limit	4 kΩ
Output voltage	
• for signal "1", min.	2L+ (-0,8 V)
Output current	
• for signal "1" rated value	2 A
• for signal "0" residual current, max.	0.5 mA
Parallel switching of two outputs	
• for uprating	No
 for redundant control of a load 	Yes
Switching frequency	
with resistive load, max.	100 Hz
with inductive load, max.	0.5 Hz
• on lamp load, max.	1 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 55 °C, max.	4 A
Cable length	
• shielded, max.	30 m
• unshielded, max.	30 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
 Diagnostic information readable 	Yes
Short-circuit	Yes; Short-circuit of outputs to ground; module by module
Diagnostics indication LED	
Group error SF (red)	Yes
 Status indicator digital output (green) 	Yes
Potential separation	
between backplane bus and all other circuit	Yes
components	
Potential separation digital outputs	N-
• between the channels	No
 between the channels and backplane bus 	Yes

Isolation		
Isolation tested with	707 V DC (type test)	
Standards, approvals, certificates		
Suitable for safety-related tripping of standard modules	Yes	
Highest safety class achievable for safety-related tripping of standard modules		
Performance level according to ISO 13849-1	PL d	
 Category according to ISO 13849-1 	Cat. 3	
 SILCL according to IEC 62061 	SILCL 2	
Dimensions		
Width	45 mm	
Height	130 mm	
Depth	35 mm	
Weights		
Weight, approx.	140 g	
last modified:	05/13/2020	